

# ***Analysis on Homogeneous Spaces***

***March 22-25, 2007***

***Tucson, Arizona.***

## ***Schedule of Talks***

### ***Thursday, 22<sup>nd</sup>***

- 1:00pm Registration
- 1:30pm J. Behrstock, *Dimension and rank of mapping class groups.*
- 2:30pm N. Wallach, *Generalized Whittaker Models for Degenerate Principal Series.*
- 3:30pm Coffee (in Room 401 N)
- 4:00pm Mathematics Colloquium, Richard Melrose, MIT.

### ***Friday, 23<sup>rd</sup>***

- 9:00 G. Olafsson, *The Heat equation on finite and infinite dimensional symmetric spaces*
- 10:00 Coffee
- 10:20 J. Isenberg, *Ricci Flow of Homogeneous Geometries and Einstein Evolution of Spatially Homogeneous Cosmologies*
- 11:30 S. Koshkin, *Homogeneous spaces and the gauge theory.*
- 12:10 Lunch
- 1:30 M. Gekhtman, *Semiconductor nets, cluster algebras and integrable systems*
- 2:30 Coffee
- 3:00 B. Rubin, *Invariant Functions on Grassmannians and the Busemann-Petty Problem*
- 3:50 T. Payne, *The Ricci Flow for Nilmanifolds*
- 4:30 Coffee
- 5:00 W. Meeks, *The geometry of complete embedded minimal and constant mean curvature surfaces in a complete homogeneous 3 manifold.*

**Saturday, 24<sup>th</sup>**

- 9:00 J. Millson, *Generalized Kostant convexity theorems, the constant term map on spherical Hecke algebras and branching to Levi subgroups*
- 10:00 Coffee
- 10:30 K. Tapp, *Quasi-positive curvature on homogeneous bundles*
- 11:20 C. Seaton, *Generalized orbifold characteristic classes for orbifolds*
- 12:00 Lunch
- 1:30 M. Kapovich, *Projections in symmetric spaces and buildings.*
- 2:30 Coffee
- 3:00 E. Proctor, *An isospectral deformation on an orbifold quotient of a nilmanifold.*
- 3:50 T. Melcher, *Heisenberg group heat kernel inequalities*
- 4:30 Coffee
- 5:00 R. Hladky, *Minimal and isoperimetric surfaces in Carnot groups.*
- 6:30 **Banquet, Redington Restaurant, Students Union.**

**Sunday, 25<sup>th</sup>**

- 9:00 S. Gindikin, *Harmonic analysis on symmetric spaces from point of view of complex analysis.*
- 10:00 Coffee
- 10:30 C. Gordon, *A torus action method for constructing manifolds with the same spectral data.*
- 11:30 Lunch
- 1:00 J. Ryan, *Dirac type operators on spin manifolds associated with generalized arithmetic groups.*
- 1:50 I. Shilin, *On some series and integrals related to the groups  $SO(2,1)$  and  $SO(2,2)$ .*